FIG.1

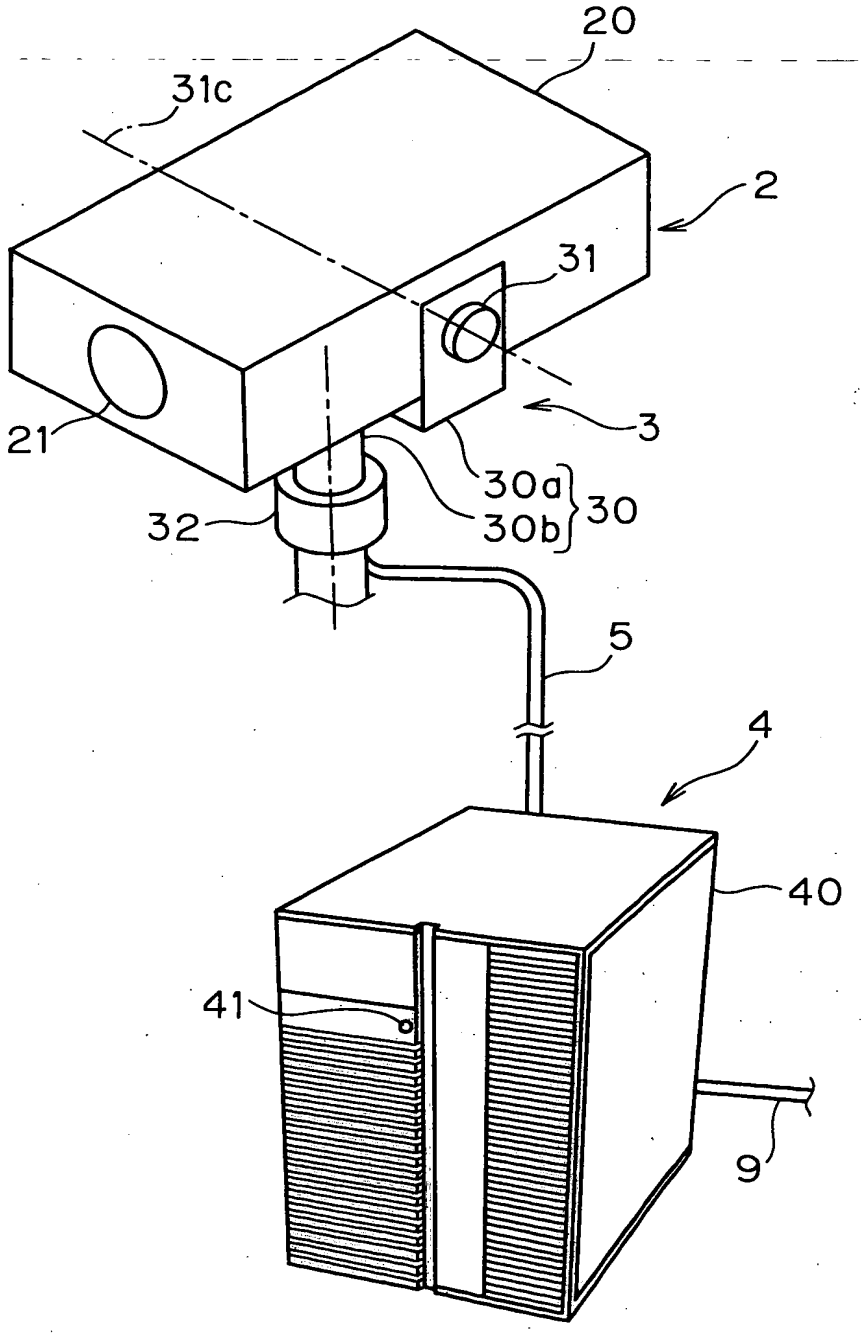


FIG.2

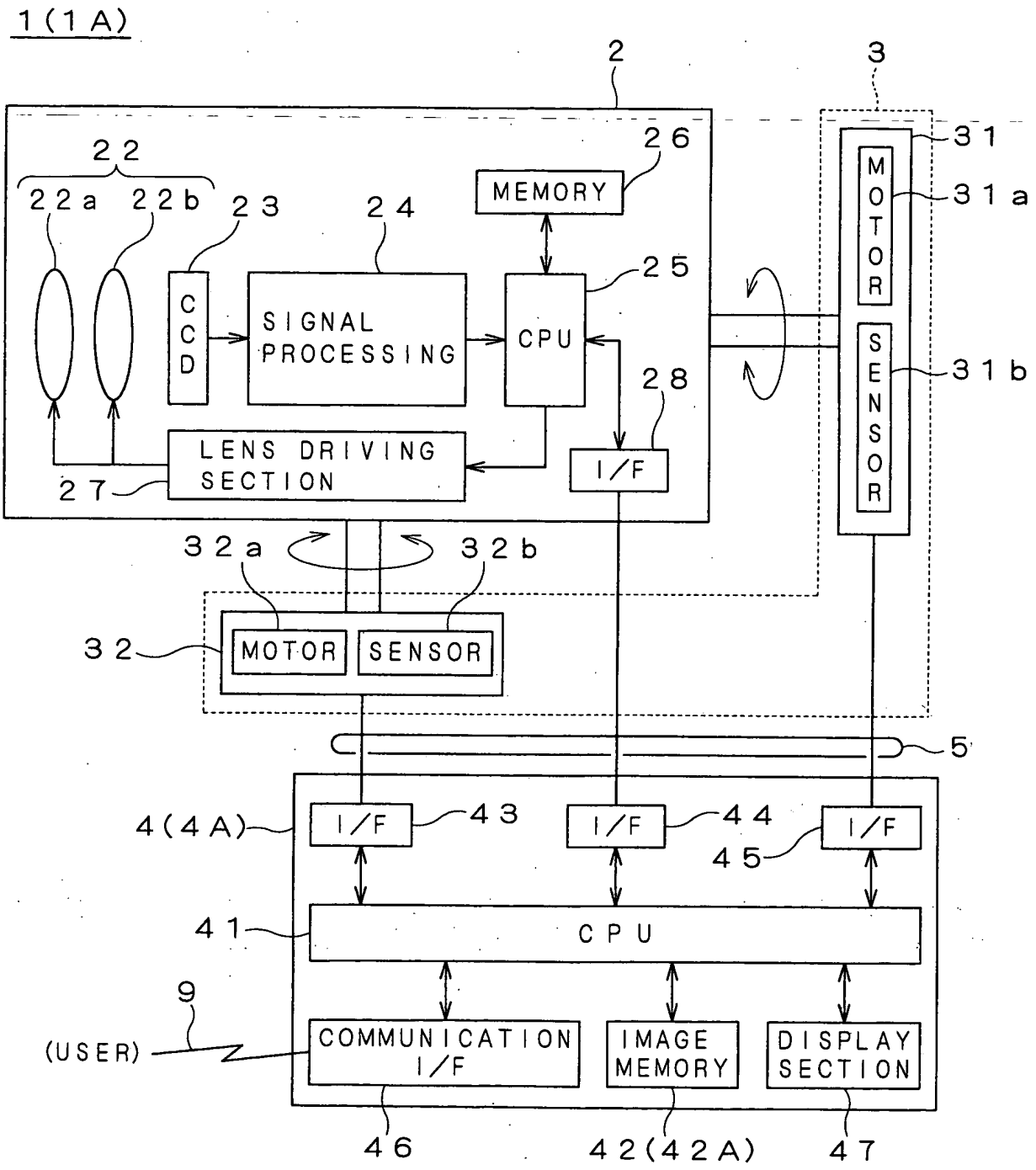

1(1A)
2
3
22
22a
22b
23
24
26
MEMORY
25
CCD
SIGNAL PROCESSING
CPU
28
I/F
LENS DRIVING SECTION
27
31
MOTOR
31a
SENSOR
31b
32a
32b
32
MOTOR
SENSOR
5
4(4A)
I/F
43
I/F
44
I/F
45
41
CPU
9
(USER)
COMMUNICATION I/F
IMAGE MEMORY
DISPLAY SECTION
46
42(42A)
47

FIG.3

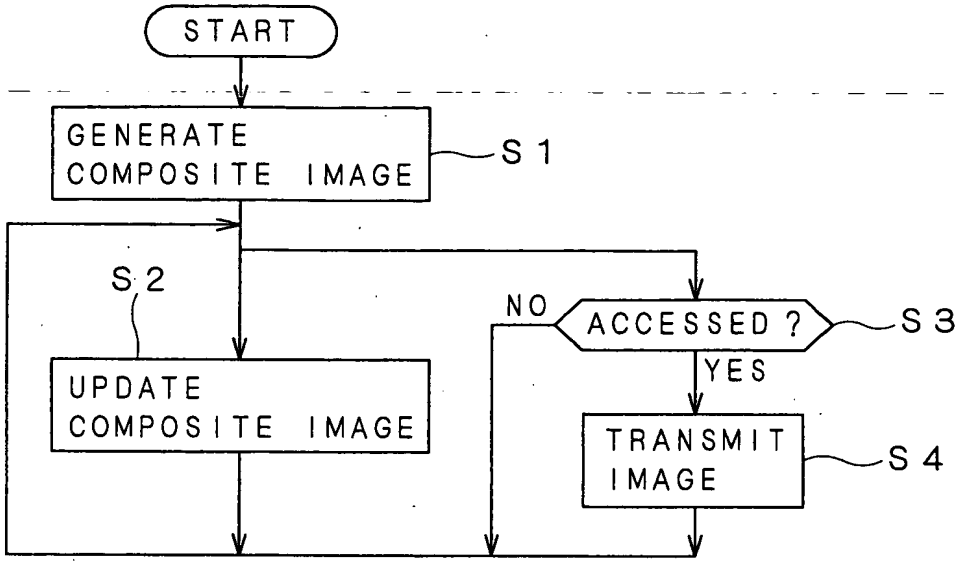
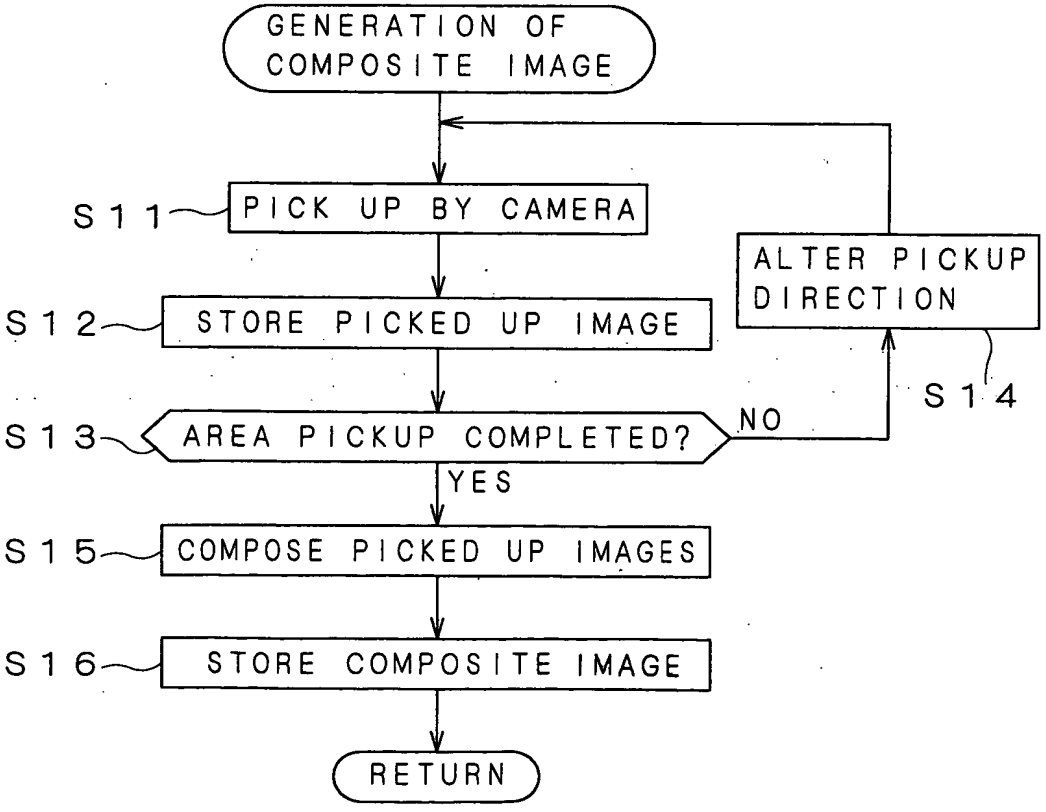

START
GENERATE COMPOSITE IMAGE
S1
S2
UPDATE COMPOSITE IMAGE
NO
ACCESSED ?
S3
YES
TRANSMIT IMAGE
S4

FIG.4


GENERATION OF COMPOSITE IMAGE
S11
PICK UP BY CAMERA
S12
STORE PICKED UP IMAGE
S13
AREA PICKUP COMPLETED?
NO
YES
ALTER PICKUP DIRECTION
S14
S15
COMPOSE PICKED UP IMAGES
S16
STORE COMPOSITE IMAGE
RETURN

UNITED SECRETARY

FIG.5

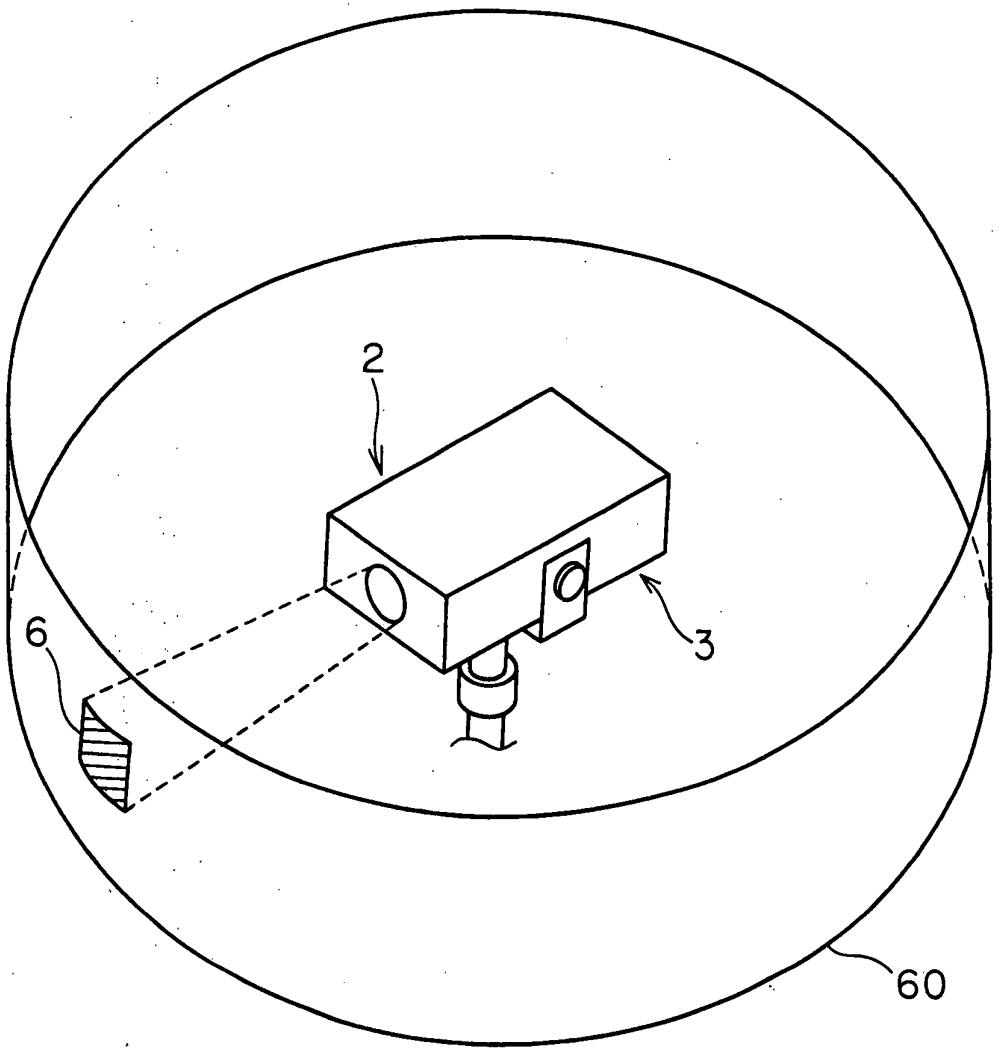


FIG.6A

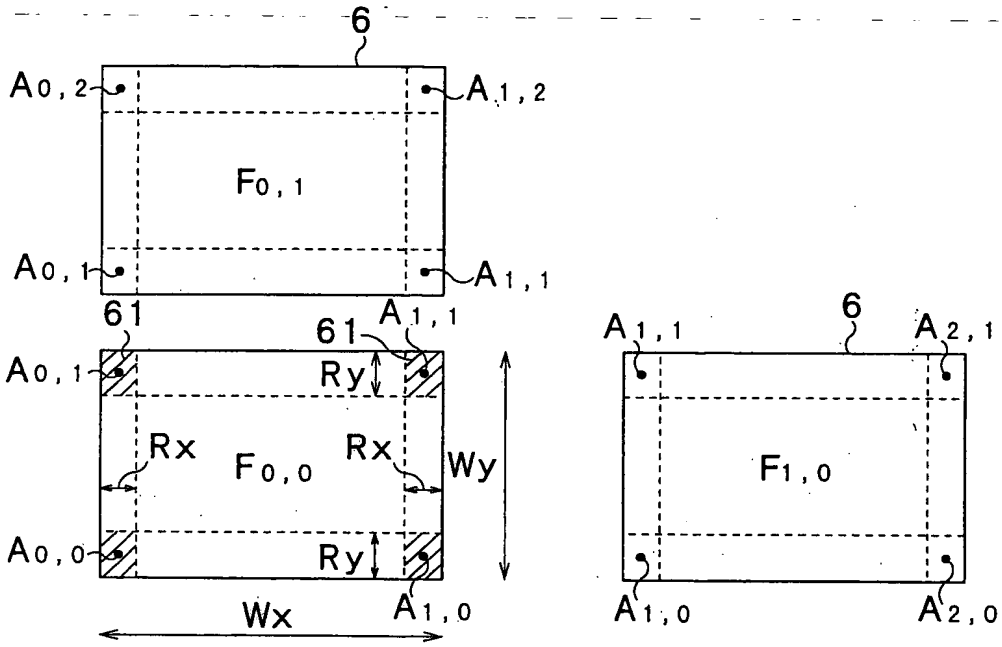

6
A0,2
A1,2
F0,1
A0,1
A1,1
61
61
A1,1
A0,1
Ry
Rx
F0,0
Rx
Wy
A0,0
Ry
Wx
A1,0
A1,1
6
A2,1
F1,0
A1,0
A2,0

FIG.6B

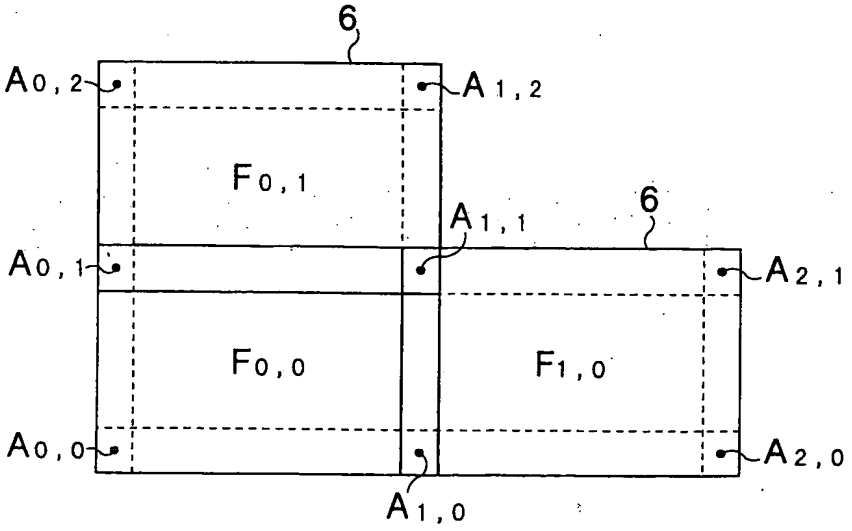

6
A0,2
A1,2
F0,1
A1,1
6
A0,1
A2,1
F0,0
F1,0
A0,0
A2,0
A1,0

FIG. 7A

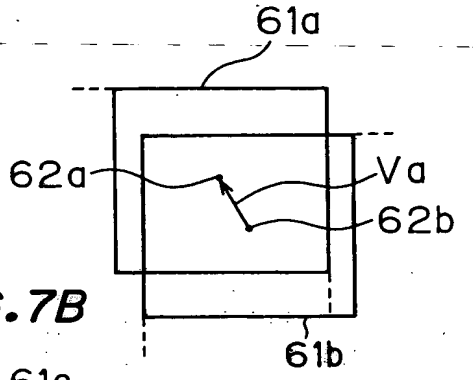


FIG. 7B

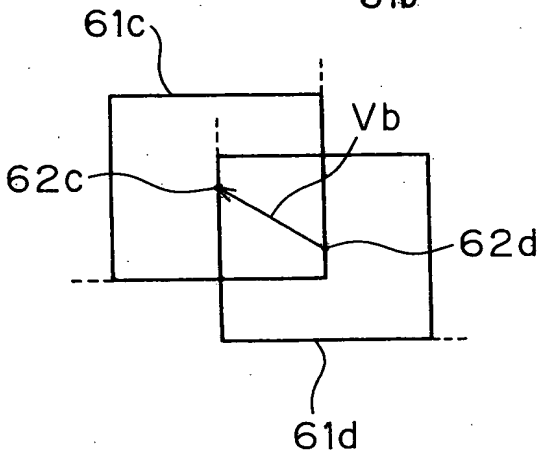


FIG. 7C

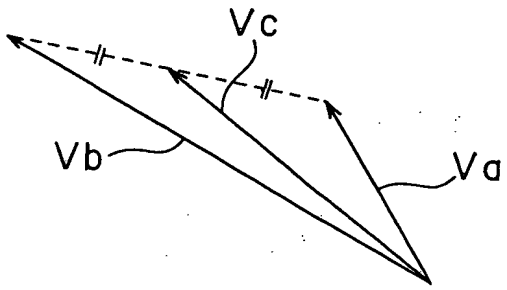


FIG.8A

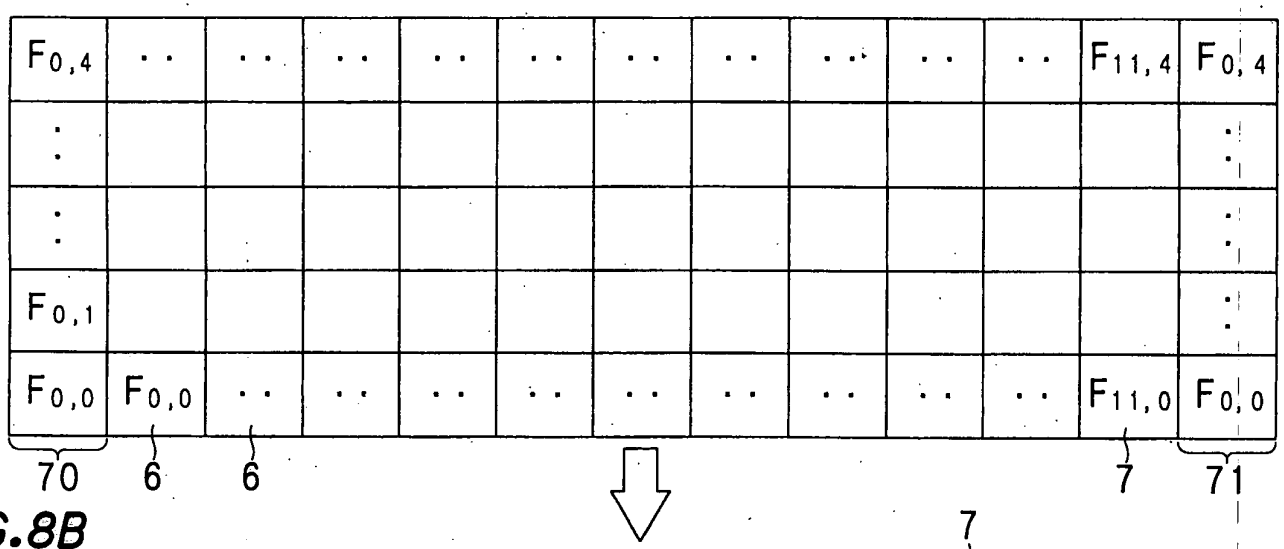


FIG.8B

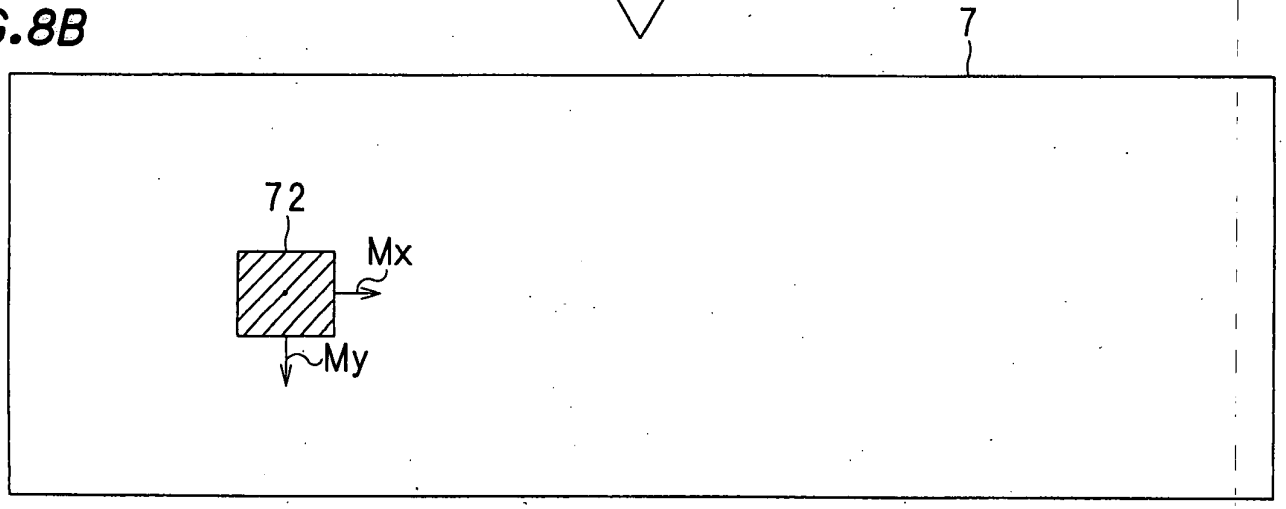


FIG.9

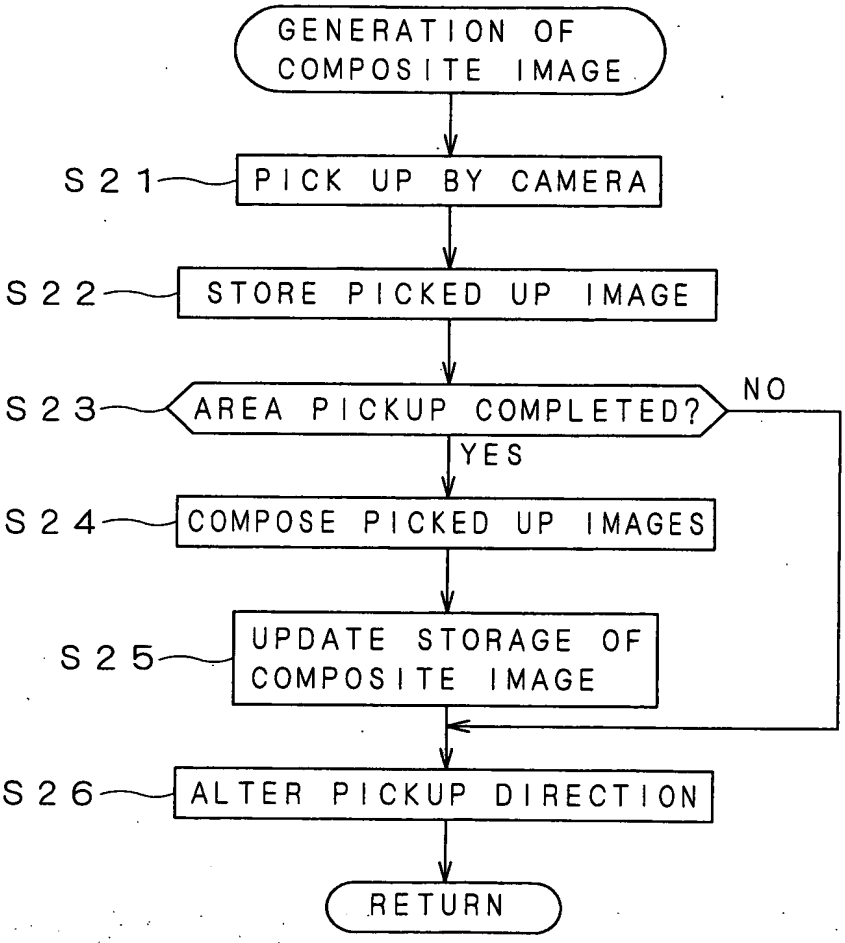

GENERATION OF COMPOSITE IMAGE
S21
PICK UP BY CAMERA
S22
STORE PICKED UP IMAGE
S23
AREA PICKUP COMPLETED?
NO
YES
S24
COMPOSE PICKED UP IMAGES
S25
UPDATE STORAGE OF COMPOSITE IMAGE
S26
ALTER PICKUP DIRECTION
RETURN

FIG.10

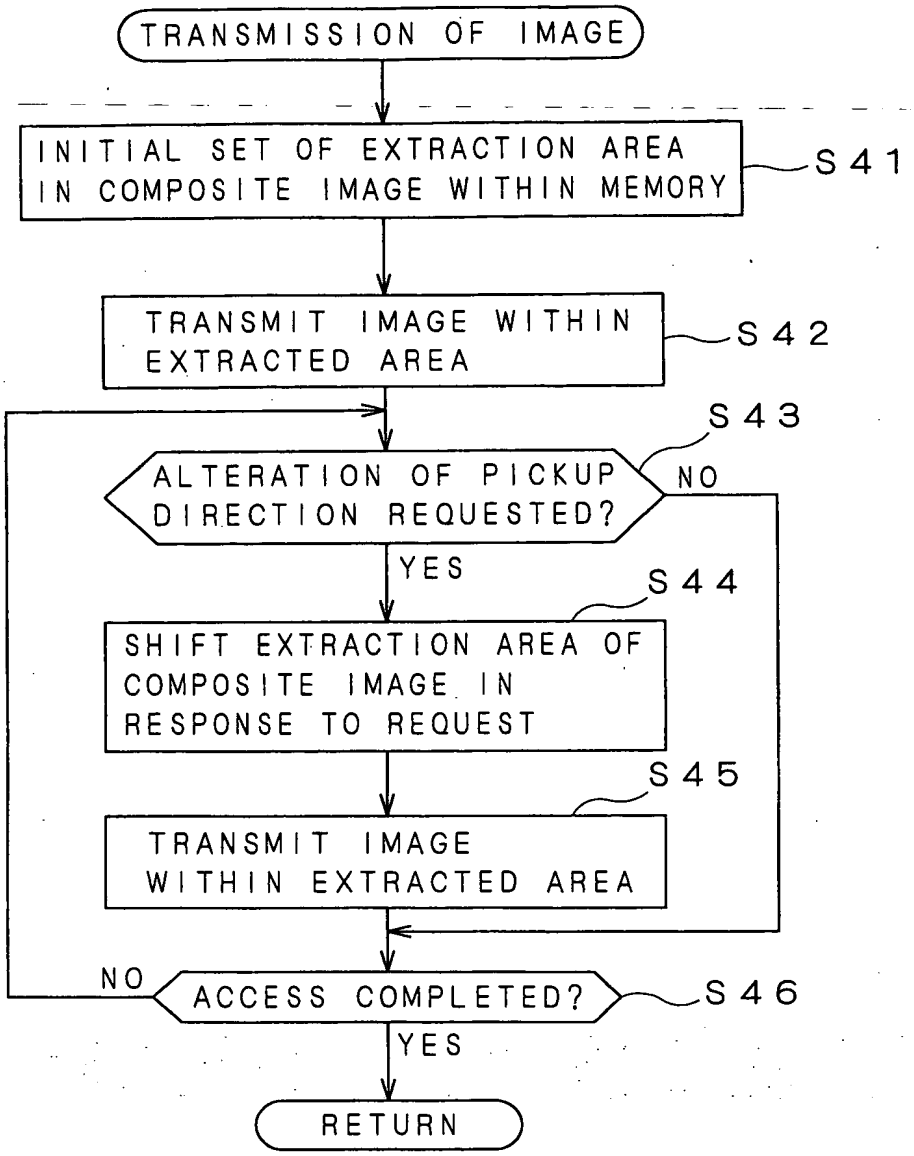

TRANSMISSION OF IMAGE
INITIAL SET OF EXTRACTION AREA IN COMPOSITE IMAGE WITHIN MEMORY
S41
TRANSMIT IMAGE WITHIN EXTRACTED AREA
S42
S43
ALTERATION OF PICKUP DIRECTION REQUESTED?
NO
YES
S44
SHIFT EXTRACTION AREA OF COMPOSITE IMAGE IN RESPONSE TO REQUEST
S45
TRANSMIT IMAGE WITHIN EXTRACTED AREA
NO
ACCESS COMPLETED?
S46
YES
RETURN

FIG.11

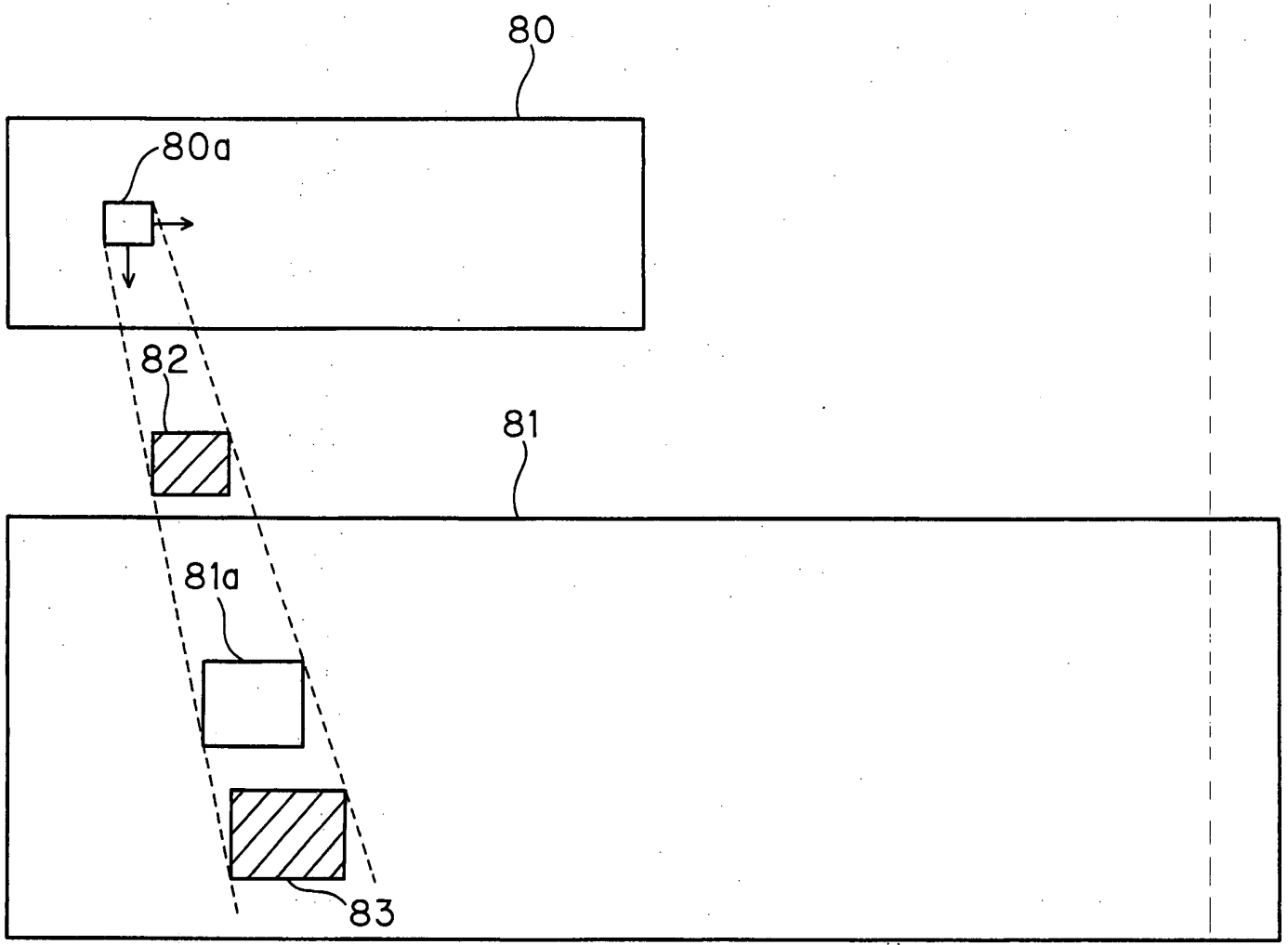


FIG.12

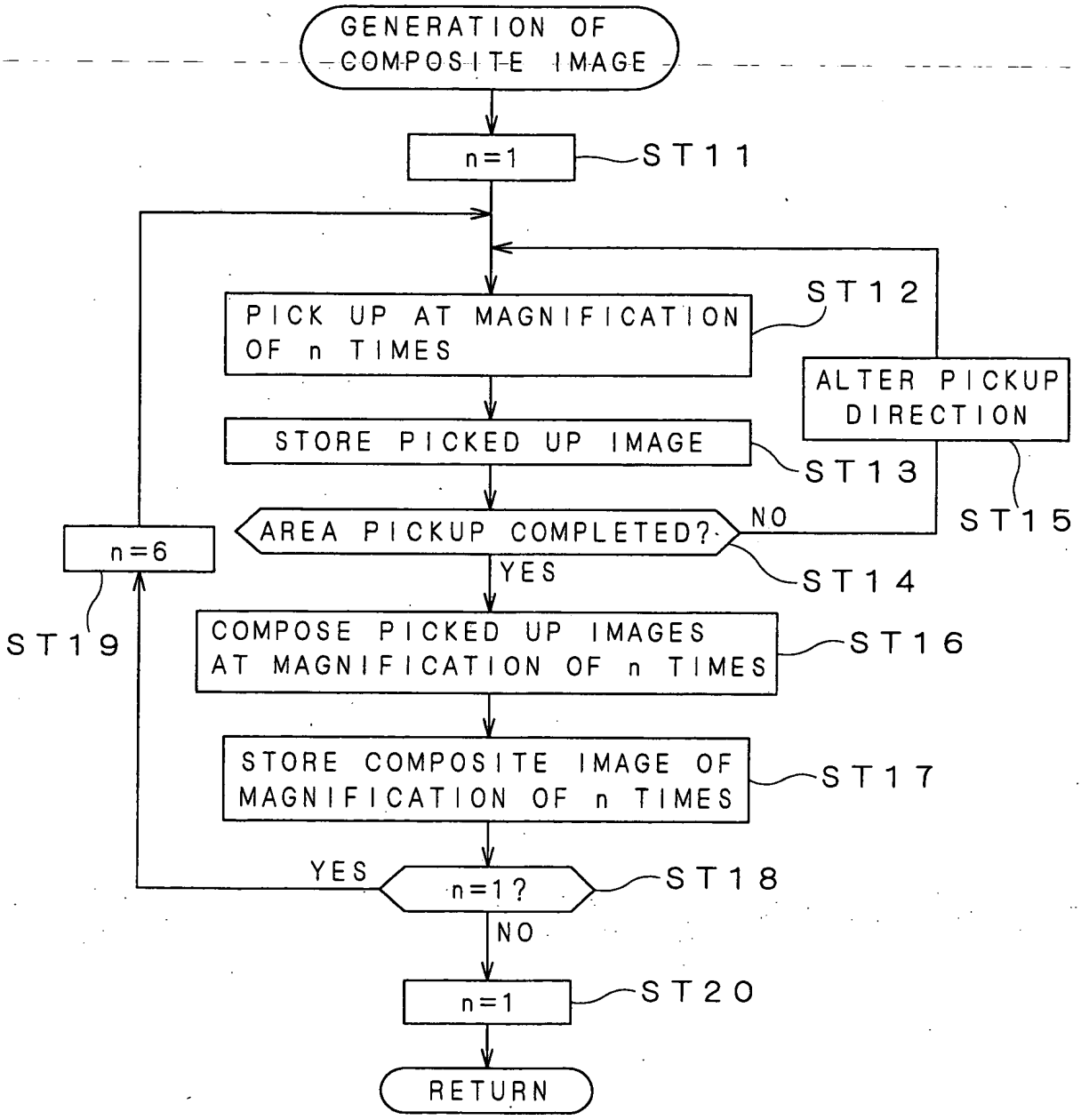

GENERATION OF COMPOSITE IMAGE
n=1
ST11
PICK UP AT MAGNIFICATION OF n TIMES
ST12
ALTER PICKUP DIRECTION
STORE PICKED UP IMAGE
ST13
ST15
AREA PICKUP COMPLETED?
NO
ST14
YES
n=6
ST19
COMPOSE PICKED UP IMAGES AT MAGNIFICATION OF n TIMES
ST16
STORE COMPOSITE IMAGE OF MAGNIFICATION OF n TIMES
ST17
YES
n=1?
ST18
NO
n=1
ST20
RETURN

FIG.13

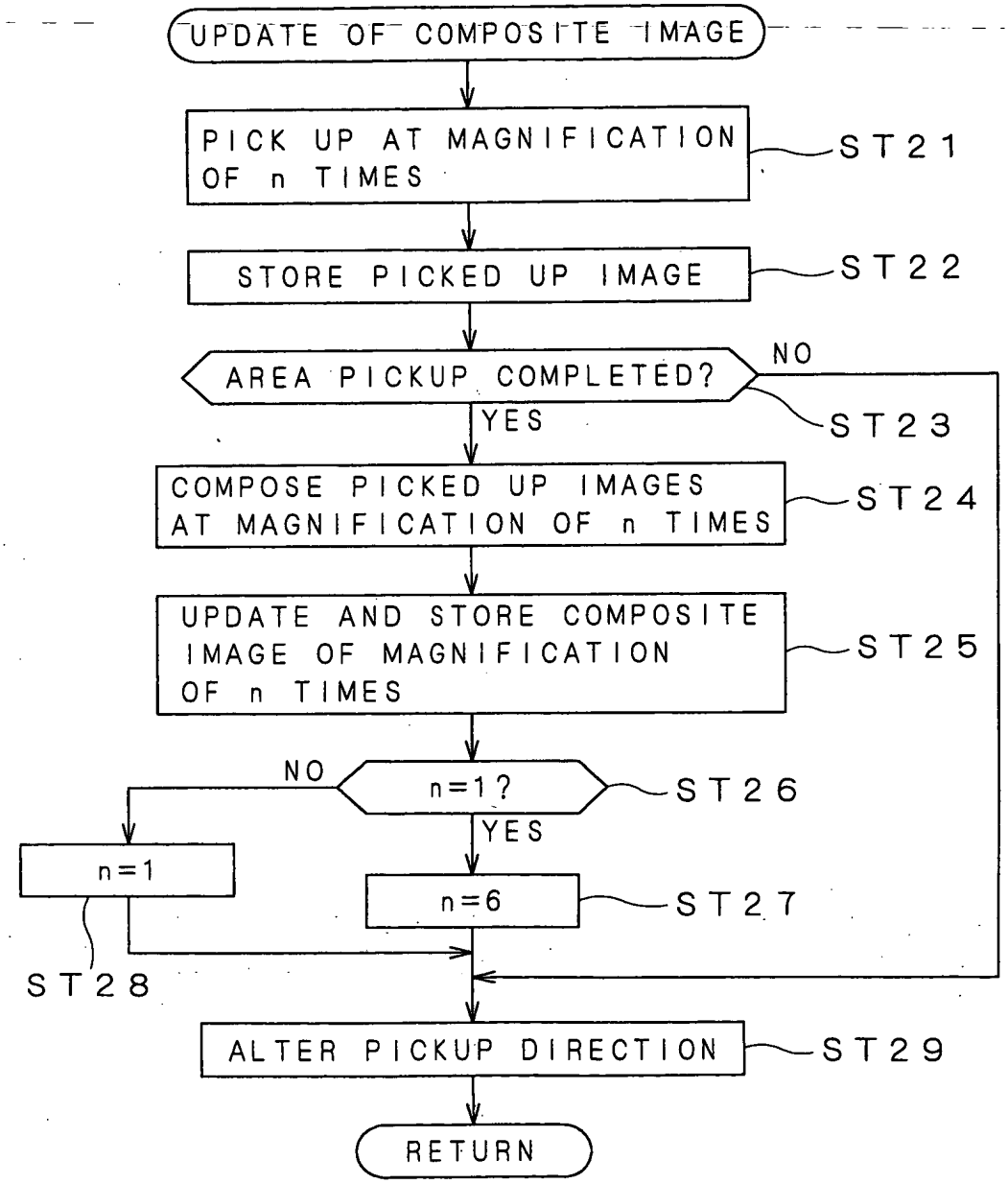

UPDATE OF COMPOSITE IMAGE
PICK UP AT MAGNIFICATION OF n TIMES
ST21
STORE PICKED UP IMAGE
ST22
AREA PICKUP COMPLETED?
NO
YES
ST23
COMPOSE PICKED UP IMAGES AT MAGNIFICATION OF n TIMES
ST24
UPDATE AND STORE COMPOSITE IMAGE OF MAGNIFICATION OF n TIMES
ST25
NO
n=1?
ST26
YES
n=1
n=6
ST27
ST28
ALTER PICKUP DIRECTION
ST29
RETURN

FIG.14

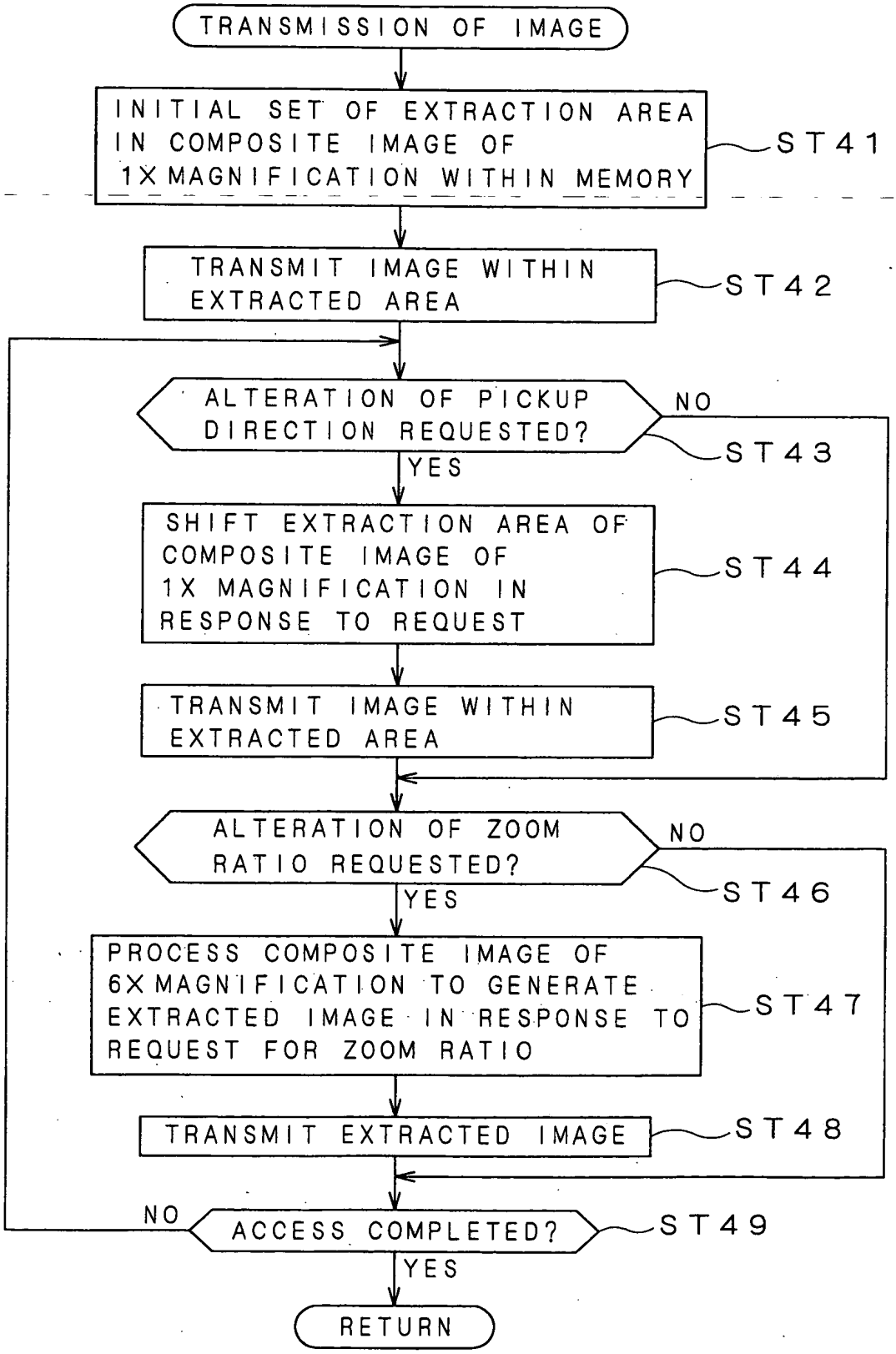

TRANSMISSION OF IMAGE
INITIAL SET OF EXTRACTION AREA IN COMPOSITE IMAGE OF 1X MAGNIFICATION WITHIN MEMORY
ST41
TRANSMIT IMAGE WITHIN EXTRACTED AREA
ST42
ALTERATION OF PICKUP DIRECTION REQUESTED?
NO
ST43
YES
SHIFT EXTRACTION AREA OF COMPOSITE IMAGE OF 1X MAGNIFICATION IN RESPONSE TO REQUEST
ST44
TRANSMIT IMAGE WITHIN EXTRACTED AREA
ST45
ALTERATION OF ZOOM RATIO REQUESTED?
NO
ST46
YES
PROCESS COMPOSITE IMAGE OF 6X MAGNIFICATION TO GENERATE EXTRACTED IMAGE IN RESPONSE TO REQUEST FOR ZOOM RATIO
ST47
TRANSMIT EXTRACTED IMAGE
ST48
NO
ACCESS COMPLETED?
ST49
YES
RETURN

FIG.15A

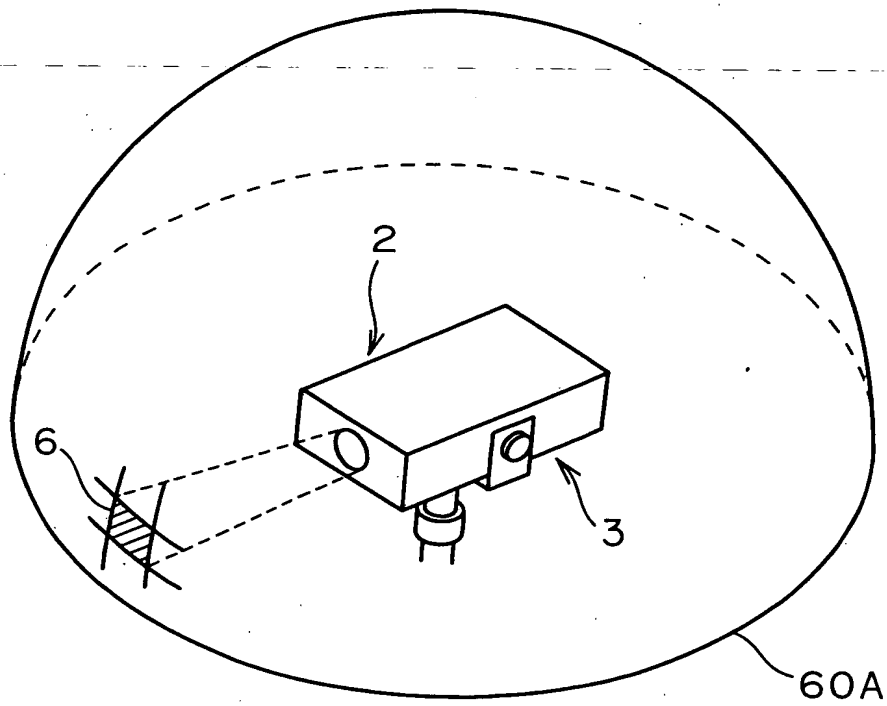


FIG.15B

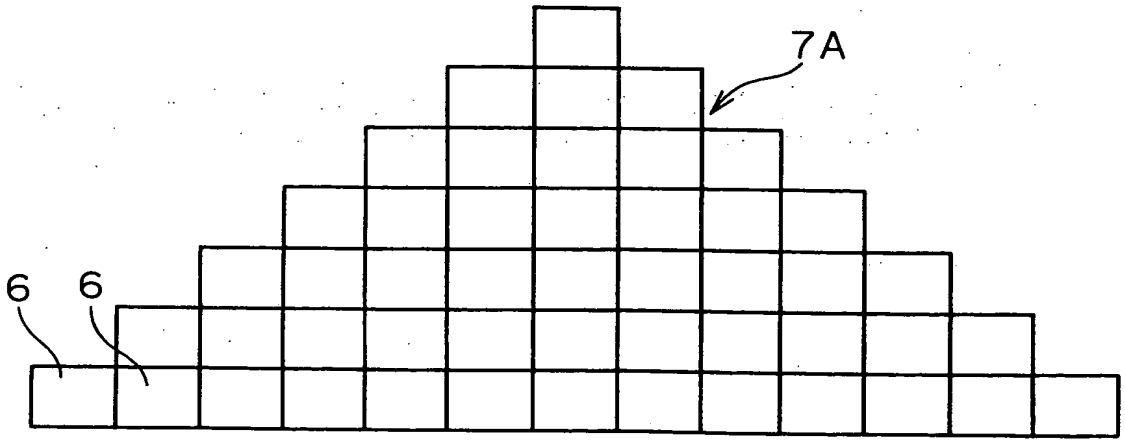


FIG.16

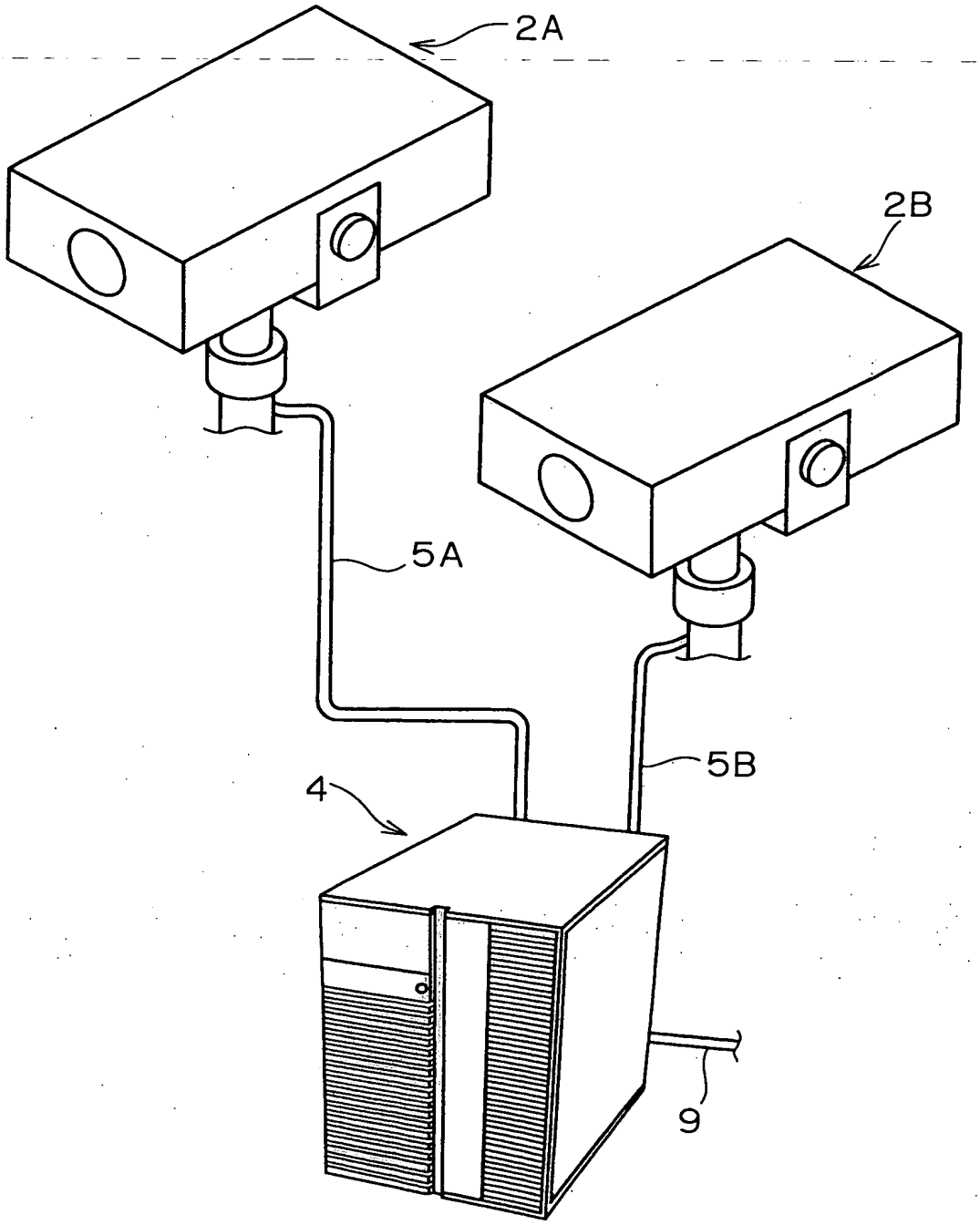


FIG.17A

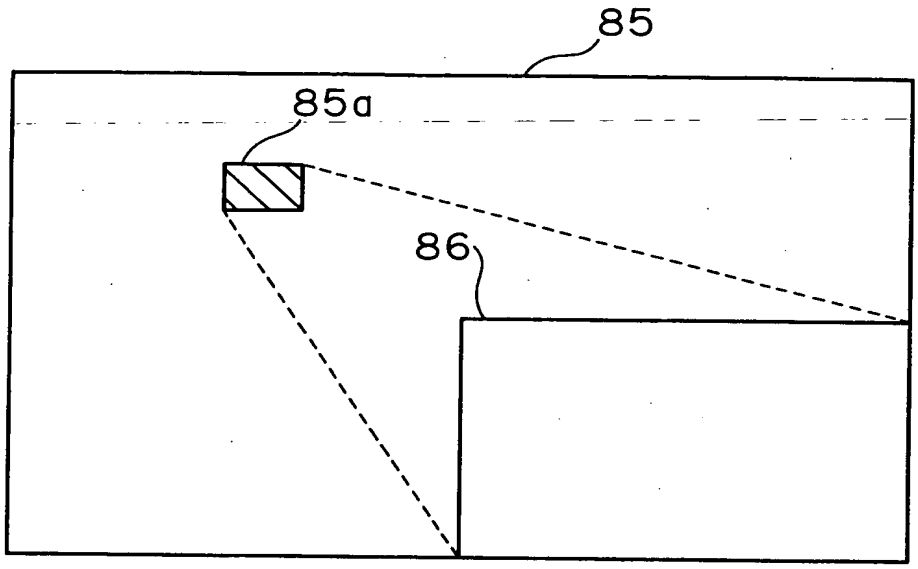


FIG.17B

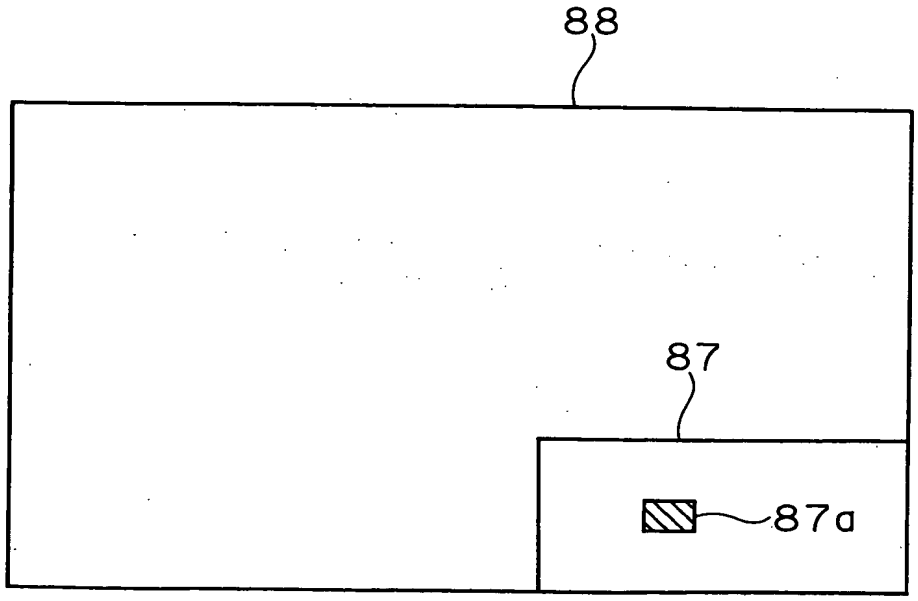


FIG.18

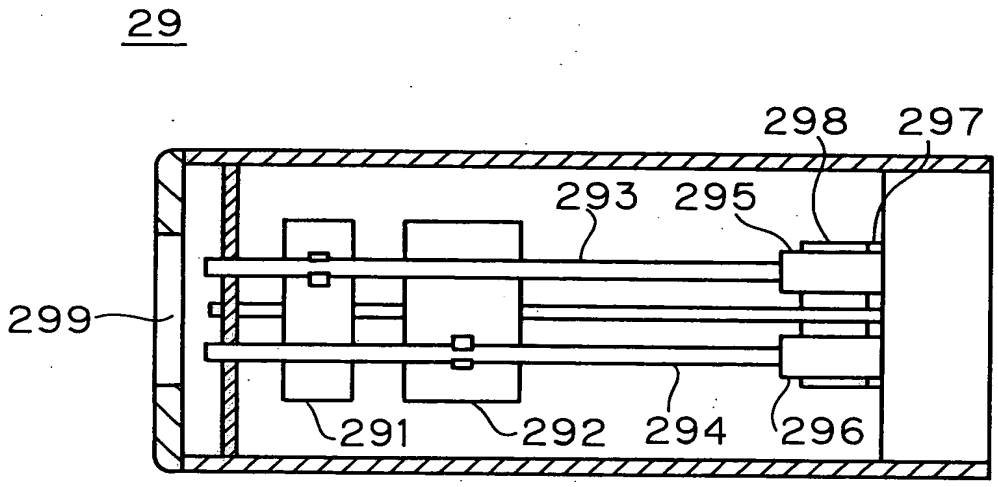
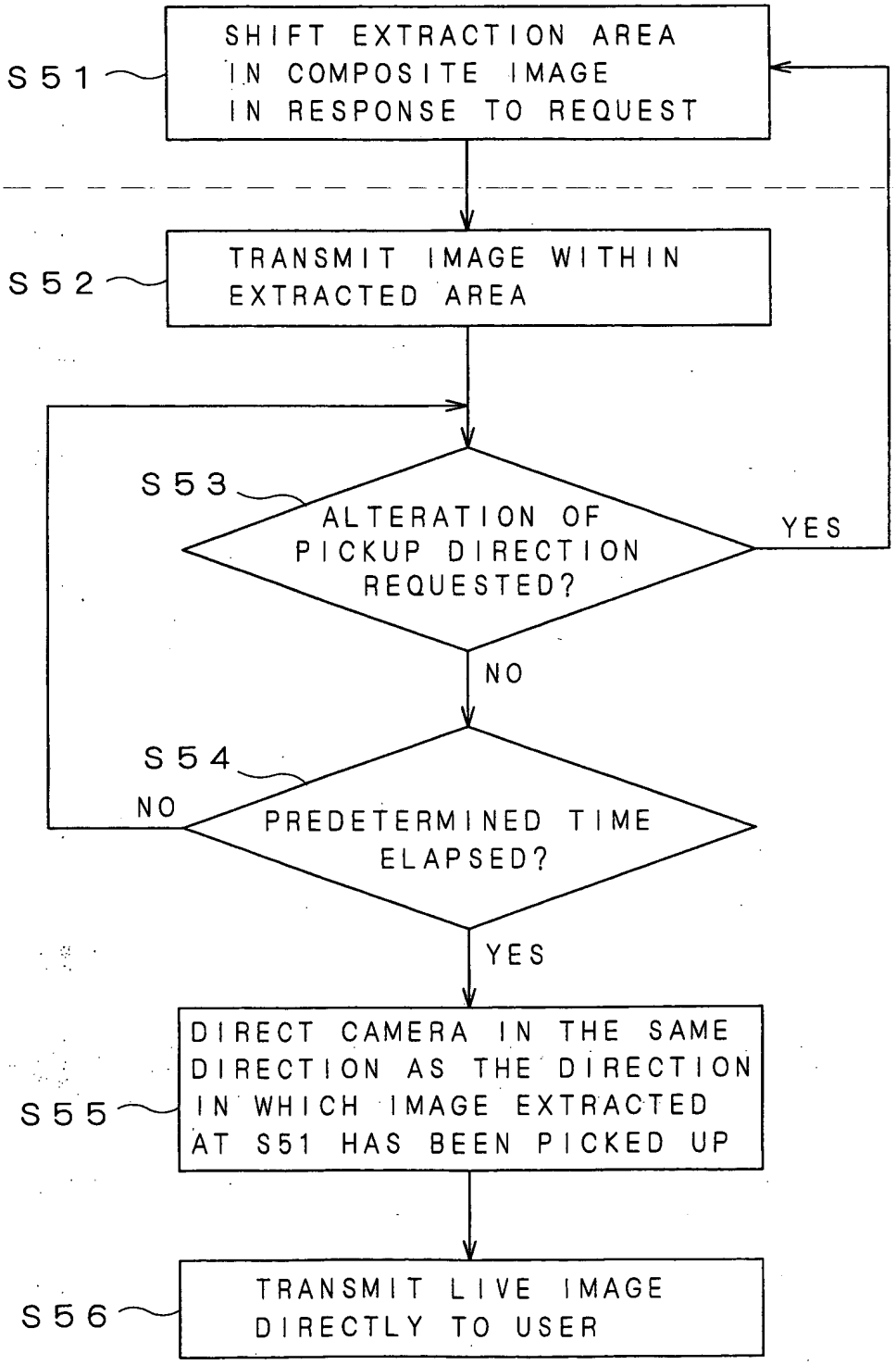


FIG.19


S51
SHIFT EXTRACTION AREA IN COMPOSITE IMAGE IN RESPONSE TO REQUEST
S52
TRANSMIT IMAGE WITHIN EXTRACTED AREA
S53
ALTERATION OF PICKUP DIRECTION REQUESTED?
YES
NO
S54
NO
PREDETERMINED TIME ELAPSED?
YES
S55
DIRECT CAMERA IN THE SAME DIRECTION AS THE DIRECTION IN WHICH IMAGE EXTRACTED AT S51 HAS BEEN PICKED UP
S56
TRANSMIT LIVE IMAGE DIRECTLY TO USER